



#48

SEQUENCE LISTING

<110> Westinghouse  
Li, Shyun  
Tularik Inc.

<120> IRAK-4: Compositions and Methods of Use

<130> 018781-003910US

<140> US 09/759,595

<141> 2001-01-11

<150> US 60/176,395

<151> 2000-01-13

<160> 7

<170> PatentIn Ver. 2.1

<210> 1

<211> 460

<212> PRT

<213> Homo sapiens

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Lys Lys Leu Ala Val Ala Ile Lys Lys Pro Ser Gly Asp Asp Arg Tyr  
35 40 45

Asn Gln Phe His Ile Arg Arg Phe Glu Ala Leu Leu Gln Thr Gly Lys  
50 55 60

Ser Pro Thr Ser Glu Leu Leu Phe Asp Trp Gly Thr Thr Asn Cys Thr  
65 70 75 80

Ala Gly Asp Leu Val Asp Leu Leu Ile Gln Asn Glu Phe Phe Ala Pro  
85 90 95

Ala Ser Leu Leu Leu Pro Asp Ala Val Pro Lys Thr Ala Asn Thr Leu  
100 105 110

Pro Ser Lys Glu Ala Ile Thr Val Gln Gln Lys Gln Met Pro Phe Cys  
115 120 125

Asp Lys Asp Arg Thr Leu Met Thr Pro Val Gln Asn Leu Glu Gln Ser  
130 135 140

Tyr Met Pro Pro Asp Ser Ser Ser Pro Glu Asn Lys Ser Leu Glu Val  
145 150 155 160

Ser Asp Thr Arg Phe His Ser Phe Ser Phe Tyr Glu Leu Lys Asn Val  
165 170 175

Thr Asn Asn Phe Asp Glu Arg Pro Ile Ser Val Gly Gly Asn Lys Met  
180 185 190

Gly Glu Gly Gly Phe Gly Val Val Tyr Lys Gly Tyr Val Asn Asn Thr  
 195 200 205  
 Thr Val Ala Val Lys Lys Leu Ala Ala Met Val Asp Ile Thr Thr Glu  
 210 215 220  
 Glu Leu Lys Gln Gln Phe Asp Gln Glu Ile Lys Val Met Ala Lys Cys  
 225 230 235 240  
 Gln His Glu Asn Leu Val Glu Leu Leu Gly Phe Ser Ser Asp Gly Asp  
 245 250 255  
 Asp Leu Cys Leu Val Tyr Val Tyr Met Pro Asn Gly Ser Leu Leu Asp  
 260 265 270  
 Arg Leu Ser Cys Leu Asp Gly Thr Pro Pro Leu Ser Trp His Met Arg  
 275 280 285  
 Cys Lys Ile Ala Gln Gly Ala Ala Asn Gly Ile Asn Phe Leu His Glu  
 290 295 300  
 Asn His His Ile His Arg Asp Ile Lys Ser Ala Asn Ile Leu Leu Asp  
 305 310 315 320  
 Glu Ala Phe Thr Ala Lys Ile Ser Asp Phe Gly Leu Ala Arg Ala Ser  
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 Glu Lys Phe Ala Gln Thr Val Met Thr Ser Arg Ile Val Gly Thr Thr  
 340 345 350  
 Ala Tyr Met Ala Pro Glu Ala Leu Arg Gly Glu Ile Thr Pro Lys Ser  
 355 360 365  
 Asp Ile Tyr Ser Phe Gly Val Val Leu Leu Glu Ile Ile Thr Gly Leu  
 370 375 380  
 Pro Ala Val Asp Glu His Arg Glu Pro Gln Leu Leu Leu Asp Ile Lys  
 385 390 395 400  
 Glu Glu Ile Glu Asp Glu Glu Lys Thr Ile Glu Asp Tyr Ile Asp Lys  
 405 410 415  
 Lys Met Asn Asp Ala Asp Ser Thr Ser Val Glu Ala Met Tyr Ser Val  
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 Ala Ser Gln Cys Leu His Glu Lys Lys Asn Lys Arg Pro Asp Ile Lys  
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<212> DNA

<213> Homo sapiens

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 <222> (1)..(1383)  
 <223> human IRAK-4

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 aaaccatctg gtgatgatag atacaatcag tttcacataa ggagatttga agcattactt 180  
 caaactggaa aaagtccac ttctgaatta ctgtttgact ggggcaccac aaattgcaca 240  
 gctggtgatc ttgtggatct tttgatccaa aatgaatttt ttgctcctgc gagtcttttg 300  
 ctcccagatg ctgttcccaa aactgcta acactacctt ctaaagaagc tataacagtt 360  
 cagcaaaaac agatgccttt ctgtgacaaa gacaggacat tgatgacacc tgtgcagaat 420  
 cttgaacaaa gctatatgcc acctgactcc tcaagtccag aaaataaaaag tttagaagtt 480  
 agtgatacac gttttcacag tttttcattt tatgaattga agaatgtcac aaataacttt 540  
 gatgaacgac ccattttctgt tgggtggaat aaaatgggag agggaggatt tggagttgta 600  
 tataaaggct acgtaaataa cacaactgtg gcagtgaaga agcttgacagc aatggttgac 660  
 attactactg aagaactgaa acagcagttt gatcaagaaa taaaagtaat ggcaaagtgt 720  
 caacatgaaa acttagtaga actacttggt ttctcaagtg atggagatga cctctgctta 780  
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 Lys Lys Leu Ala Val Ala Ile Lys Lys Pro Ser Gly Asp Asp Arg Tyr  
 35 40 45  
 Asn Gln Phe His Ile Arg Arg Phe Glu Ala Leu Leu Gln Thr Gly Lys  
 50 55 60  
 Ser Pro Thr Cys Glu Leu Leu Phe Asp Trp Gly Thr Thr Asn Cys Thr  
 65 70 75 80  
 Val Gly Asp Leu Val Asp Leu Leu Val Gln Ile Glu Leu Phe Ala Pro  
 85 90 95  
 Ala Thr Leu Leu Leu Pro Asp Ala Val Pro Gln Thr Val Lys Ser Leu  
 100 105 110  
 Pro Pro Arg Glu Ala Ala Thr Val Ala Gln Thr His Gly Pro Cys Gln  
 115 120 125

Glu Lys Asp Arg Thr Ser Val Met Pro Met Pro Lys Leu Glu His Ser  
 130 135 140  
 Cys Glu Pro Pro Asp Ser Ser Ser Pro Asp Asn Arg Ser Val Glu Ser  
 145 150 155 160  
 Ser Asp Thr Arg Phe His Ser Phe Ser Phe His Glu Leu Lys Ser Ile  
 165 170 175  
 Thr Asn Asn Phe Asp Glu Gln Pro Ala Ser Ala Gly Gly Asn Arg Met  
 180 185 190  
 Gly Glu Gly Gly Phe Gly Val Val Tyr Lys Gly Cys Val Asn Asn Thr  
 195 200 205  
 Ile Val Ala Val Lys Lys Leu Gly Ala Met Val Glu Ile Ser Thr Glu  
 210 215 220  
 Glu Leu Lys Gln Gln Phe Asp Gln Glu Ile Lys Val Met Ala Thr Cys  
 225 230 235 240  
 Gln His Glu Asn Leu Val Glu Leu Leu Gly Phe Ser Ser Asp Ser Asp  
 245 250 255  
 Asn Leu Cys Leu Val Tyr Ala Tyr Met Pro Asn Gly Ser Leu Leu Asp  
 260 265 270  
 Arg Leu Ser Cys Leu Asp Gly Thr Pro Pro Leu Ser Trp His Thr Arg  
 275 280 285  
 Cys Lys Val Ala Gln Gly Thr Ala Asn Gly Ile Arg Phe Leu His Glu  
 290 295 300  
 Asn His His Ile His Arg Asp Ile Lys Ser Ala Asn Ile Leu Leu Asp  
 305 310 315 320  
 Lys Asp Phe Thr Ala Lys Ile Ser Asp Phe Gly Leu Ala Arg Ala Ser  
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 Ala Tyr Met Ala Pro Glu Ala Leu Arg Gly Glu Ile Thr Pro Lys Ser  
 355 360 365  
 Asp Ile Tyr Ser Phe Gly Val Val Leu Leu Glu Leu Ile Thr Gly Leu  
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 385 390 395 400  
 Glu Glu Ile Glu Asp Glu Glu Lys Thr Ile Glu Asp Tyr Thr Asp Glu  
 405 410 415  
 Lys Met Ser Asp Ala Asp Pro Ala Ser Val Glu Ala Met Tyr Ser Ala  
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cDNA

<220>  
<221> CDS  
<222> (163)..(1542)  
<223> murine IRAK-4

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ccatcgacat acatacgcaa ccttaatgtg gggatcctta ggaagctgtc ggattttatt 240  
gatacctcaag aagggtggaa gaaattagca gtagctatca aaaagccgtc cggcgacgac 300  
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gagaagacga ttgaagatta cacggatgag aagatgagcg atgcggaccc tgcttcggtg 1440  
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<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:sense primer  
for amplification of human IRAK-4

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<210> 6  
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primer for amplification of human IRAK-4

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<223> Description of Artificial Sequence:epitope tag

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